

Figure 1

1. INTRODUCTION

This instruction sheet covers the basic mounting and rotating instructions for the ANSI C136.41-2013 Rotatable Dimming Receptacles. All contacts are pre-installed into the receptacle housing and pre-crimped with 305 mm (12.0 in.) lead-wire, with 14 AWG stranded wire used on the three-line voltage AC circuits and 18 AWG wire used on the four signal dimming control voltage DC circuits. Receptacle assemblies are available with both 105°C and 150°C rated wire.



NOTE

Dimensions in this instruction sheet are in millimeters. Figures and illustrations are for reference only and are not drawn to scale.

2. SHIPPING

2.1. Separation of Locking Ring from Assembly

If the locking ring becomes separated from the main assembly during shipping, it can be re-attached using the procedure shown in Figure 2. The ring is snapped onto the center receptacle housing with the TE logo aligned with either screw hole. The locking ring can then be rotated until it stops so that it is well retained on the center receptacle housing.

Align the TE logo with one of the screw holes, then snap on the lock ring.

Turn the lock ring full clockwise (or turn the center housing full counter-clockwise).

The lock ring will stop with the North indicator adjacent to the screw hole.

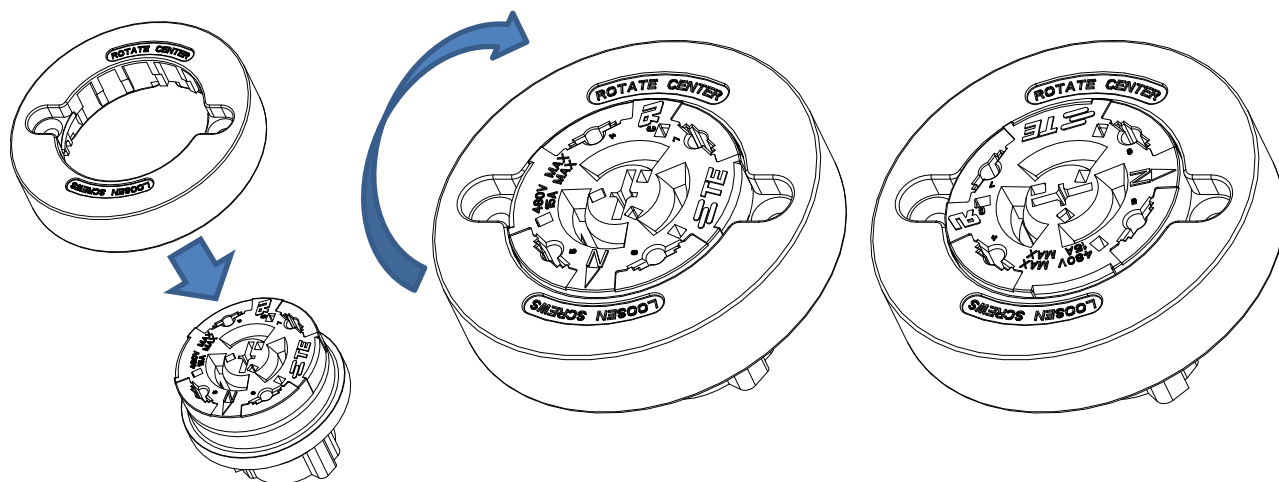


Figure 2

3. RECEPTACLE MOUNTING AND HOLE PATTERN (Figure 3)

A flat surface shall be provided on luminaire housing to mount receptacle assembly. The flatness of the mounting surface shall be within 0.5 mm, including any surface irregularities from painting or plating. To provide water-tight mounting, it is highly recommended that the TE gasket (p/n 2213626-1) be used to seal surfaces between receptacle assembly and luminaire housing. This TE gasket is available kitted with the receptacle assembly or can be bulk ordered separately. The receptacle housing has two mounting holes which accept #8 size flat-head recessed screws with 82° bevel heads. When using the TE Gasket, a screw torque of 1.0 to 2.0 N-m is recommended. Do NOT exceed 3.0 N-m. If the luminaire has a built in raised sealing ring on the surface, please consult with TE engineering for assistance for a custom gasket design.



CAUTION

If a non-TE gasket is used, it is the responsibility of the installer to determine the mounting screw torque to ensure a water-tight seal between the receptacle and luminaire housing. Please use customer print 2213626 for the gasket reference design. The following gasket features are critical to the proper operation and sealing of the rotatable dimming socket: the gasket thickness, gasket inner diameter, and the gasket durometer (40 Shore A hardness).



CAUTION

Never mount the Rotating Dimming Receptacle without a gasket present or an improper gasket design with an undersized inner diameter. Damage may occur to the locking ring when the screws are torqued to specification.

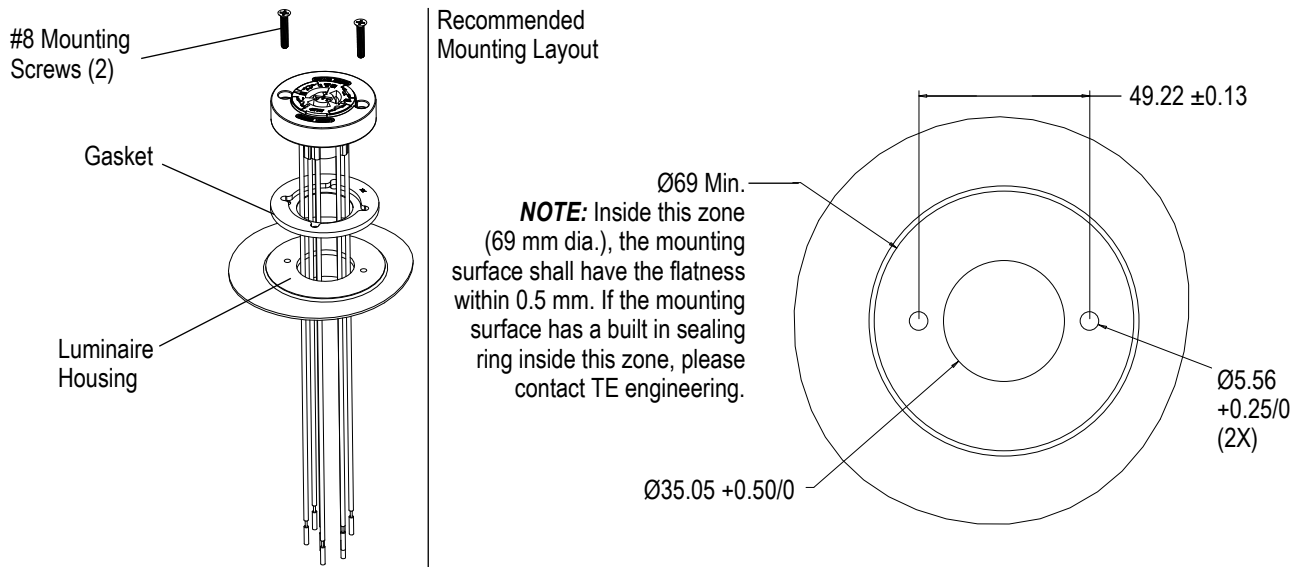


Figure 3

3.1. Mounting Location and Orientation

Locate the receptacle where artificial light cannot fall on the mating photocell causing it to turn off or cycle (on and off) at night. If possible, orient the receptacle so the North indicator points North.

4. WIRE CONNECTIONS AND DIAGRAM



DANGER

Extreme caution must be taken to ensure that power is OFF prior to disconnecting or connecting any wires to prevent electrical shock.



NOTE

All wire connections must be electrically insulated.

4.1. Wiring Diagram

The receptacle wires must be appropriately spliced with the correct line voltage power or dimming signal source. Refer to the wiring table shown in Figure 4. The wiring table is for general information only. The luminaire manufacturer must determine the appropriate wiring based upon their specific ballast/driver's dimming control components.

HIGH VOLTAGE CONNECTIONS			LOW VOLTAGE CONNECTIONS		
WIRE COLOR	POSITION #	DESCRIPTION	WIRE COLOR	POSITION #	DESCRIPTION
Black	1	Hot	Violet	4	Dimming +
White	2	Neutral	Pink	5	Dimming -
Red	3	Switched	Brown	6	Optional Signal X
	---		Orange	7	Optional Signal Y

Figure 4

5. STRAIN RELIEF

It is recommended that a means be provided to support the wire bundle extending away from the receptacle assembly to prevent inadvertent application of high force to the wire bundle from transmitting into the wire/connector interface. The suggested strain relief method is to use a cable tie and anchor mounted inside the luminaire.

6. ROTATING THE MOUNTED RECEPTACLE

Once the light fixture is installed in the field, it is easy to rotate the receptacle so the North indicator is aimed properly. Loosen the mounting screws just enough so the center receptacle housing rotates freely in the locking ring. Use a screwdriver to aim the center receptacle housing so the North indicator points in the desired direction (typically due North). The Rotatable Dimming Receptacle is designed to limit the total rotation to 355° with a stop feature. If the desired direction can't be achieved by turning clockwise due to the stop feature, simply turn the center receptacle housing counter-clockwise to the desired position. Once the desired aiming is achieved, the mounting screws can then be tightened to the proper torque. See Figure 5.



Figure 5

7. MATING AND UN-MATING PHOTOCELL TO RECEPTACLE

Align photocell blades with receptacle power contact circuits. Note that the neutral photocell blade is larger than the line and load blades, providing mating polarization. After properly aligning the blades to the receptacle power contact circuits, push downward until the photocell is bottomed on the receptacle's mating surface, slightly compressing gasket of the photocell. Then complete mating by twisting the photocell in a clockwise direction. The photocell will lock into position. To un-mate, reverse the aforementioned mating process. Reference Figure 6.

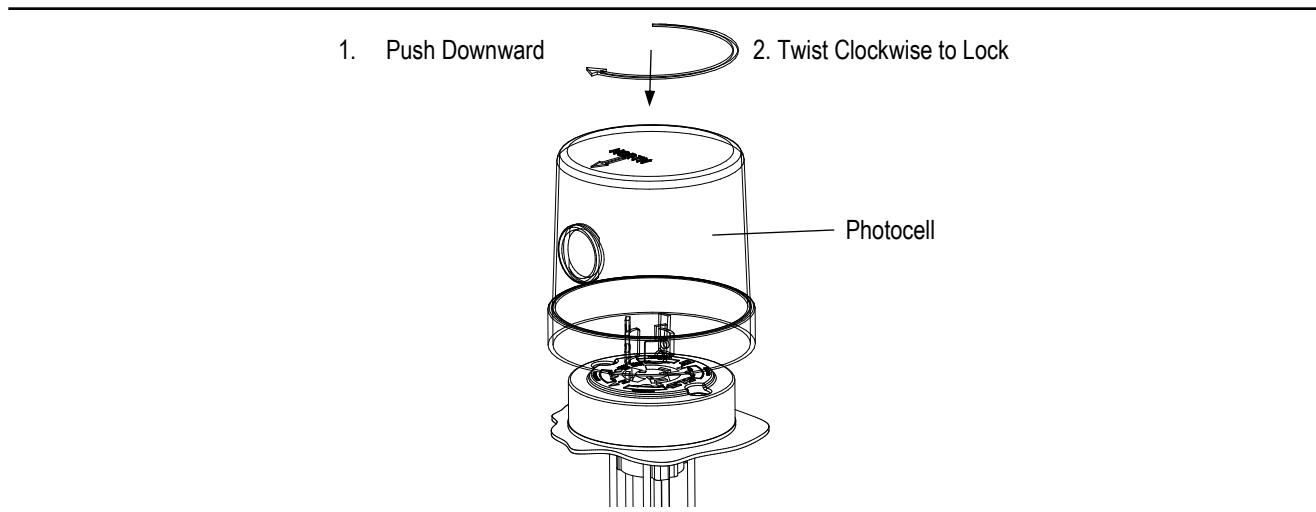


Figure 6

8. REVISION SUMMARY

- As per the recent update by NEC Article 410.69, the color coding will change to a new standard, using pink wire instead of gray control conductor wire (0-10V).
- Text of "GREY/GRAY" replaced to "PINK" in Figure 1 and 4.
- Removed Note, 2.1 Handling.